

# ORM Assessment For Units/Groups

A photograph of an F-18 Hornet fighter jet flying vertically over the deck of a ship. The jet is in a steep climb, with its wings and tail visible. Several people are standing on the deck in the foreground, looking up at the aircraft. The background shows the ship's structure and the ocean.

**ORM Assessment & Feedback**  
**Naval Safety Center**

**This is an actual fly-by during deployment of the Nuclear Aircraft Carrier USS Stennis. The pilot was grounded for 30 days, but he likes the picture and thinks it was worth it. Yikes!**



# ORM Assessment

## Who/Why/What/How/When

- ORM Assessment Team
  - ORM Team Leader - Naval Safety Center
  - ORM Assessors - various assessment commands
- VCNO & CFFC directed development of ORM assessment process to measure & inculcate ORM
- Here to conduct trial runs of an operational unit/group ORM application assessment tool
- Will observe and assess various unannounced complex evolutions w/help of ORM Assessors
- Will debrief unit/group commander when time permits after all evolution grades are gathered and collated
- Will solicit feedback on the ORM assessment



# Big Picture

- VCNO has tasked the Operations Safety Committee (OSC) with revamping ORM in the Navy & implementing a strategy to ensure inculcation into the Navy culture
  - Specifically to develop ORM assessment process to measure & inculcate desired risk management behaviors
  - CFFC directed ORM assessment process complete NLT 02 Apr 07
- The Naval Safety Center (NSC) heads up the OSC ORM working group and was designated as the Navy's ORM Model Manager
- NSC has stood up the ORM Cell to specifically address the revitalization and infusion of the ORM process into the Navy culture
  - ORM Assessment process developed by ORM Cell



# NSC ORM Strategy

## 1. Policy

- Rewrite OPNAVINST 3500.39B with better guidance
- Provide fleet with Time Critical ORM mnemonic that Sailors can remember off-duty

## 2. Training & Education

- Upgrade existing ORM Learning Continuum (OLC) with new Time Critical elements, resource management skills, and a useful communication tool (Volant model)
- Train Navy accession sources to model new Time Critical elements and desired risk management behaviors

## 3. Assessment & Feedback

- Develop ORM assessment process to measure and inculcate desired risk management behaviors

- Develop feedback mechanism to share ORM best



# ORM Assessment Strategy

- ORM Assessment should be seamless for unit/group
  - Except commander in brief/debrief w/ORM Team Leader
  - One additional rack for ORM Team Leader (or none if remote)
- ORM Assessment results are currently “white hat” only
  - Not reported to chain of command
  - Anonymous results retained for class-specific and fleet-wide data
  - SUBFOR/SURFOR may desire to make “black hat” in future
- Assess overall ORM process application for operational units/groups twice during FRTP (once early, once late)



# Levels of ORM Assessment

Level I - Conducted during Safety Surveys, IG inspections, and annual unit/activity internal assessments to measure instructional compliance, ORM admin. and implementation

Level II - Conducted early in the FRTP on operational units/groups to measure ORM process application in the operational environment:

- SUBFOR: TRE (unit)
- SURFOR: TSTA II/III (unit)/ESGEX (unit/group)
- AIRFOR: Air Wing Fallon (unit)/FST (group)/TSTA II/III (unit)

Level III - Conducted late in the FRTP on operational units/groups to measure ORM process inculcation in the operational environment prior to deployment:



# Level II/III ORM Assessments

ORM Assessors – from various assessment commands

- Identifies complex evolutions to assess beforehand and coordinates to observe the planning process (if able)
- Observes and evaluates complex evolution ORM process application using the Evolution ORM Assessment Sheet
- Gives graded sheets to ORM Team Leader

ORM Team Leader – Level II (NSC remotely)/III (NSC)

- Collects Evolution ORM Assessment Sheets from Assessors
- Collates the data into Overall ORM Assessment
- Debriefs the unit/group commander on strengths, weaknesses, and specific recommendations for improvement



# Assessing Evolution ORM

## Evolution ORM Assessment – trained ORM Assessors

- Decide what complex evolutions to assess beforehand but unit/group will not know for sure which ones until graded
- Use Evolution ORM Assessment Sheet to transcribe evolution scores and any amplifying comments
  - Assign grades to each of 20 assigned ORM tasks ranging from 5-25 points based on “Max.” allowable points and specific grading criteria delineated in Reference Guide
  - If ORM task is N/A or NOB for an evolution, it will not count against Evolution or Overall ORM Assessment grades
- Debrief the individual responsible for





# ORM Task Grading Criteria

- Specifically delineated in Evolution ORM Reference Guide and taught during Safety

Planning		Max	Pts.	Grading Criteria
1	Identified and incorporated lessons learned, best practices, ORM risk assessments or other data from previous or similar evolutions during planning.	10	10 pts.	Lessons learned, best practices, ORM risk assessments (required for new or complex evolutions), and/or other experiential data (e.g., mishap, hazard) identified & incorporated.
2	Involved operators from every functional area necessary to conduct the evolution in planning.	10	1 pt.	For each 10% of total functional areas represented, rounded to the nearest 10% (e.g., 75% = 8 pts.).
3	Conducted and documented a Deliberate or In-Depth ORM risk assessment during planning.	10	5 pts. 5 pts.	Conducted Deliberate or In-Depth risk assessment. Documented and recorded risk assessment in usable format for future planners.
4	Conducted an operational analysis, identified hazard root causes and assessed for risk, implemented controls, and prioritized resources based on residual risk.		5 pts. 5 pts. 5 pts. 5 pts. 5 pts.	Determined the specific & implied tasks and divided evolution into manageable segments/steps by either time sequence or functional area. Identified hazard root causes during each segment/ step vice symptoms for "why" behind a condition (e.g., "lack of adequate rest" vice "fatigue"). Assessed each hazard for risk in terms of both probability and severity.



# Evolution ORM Assessment Sheet

- Here's what an Evolution ORM Assessment Sheet with a score of 197 out of 230 graded points might look like.



Unit/Group: **USS SAMPLE (LHA-X)**  
Evolution: **Getting U/W, NAV Dept.**

Assessor: **NSC**  
Date/Time: **05 Feb 07, 0900L**



Planning		Max.	Pts.	Comments
1	Identified and incorporated lessons learned, best practices, ORM risk assessments or other data from previous or similar evolutions during planning.	<b>X</b>	<b>NOB</b>	
2	Involved operators from every functional area necessary to conduct the evolution in planning.	10	<b>8</b>	<b>5 of 6 areas: no CS Dept.</b>
3	Conducted and documented a Deliberate or In-Depth ORM risk assessment during planning.	10	<b>6</b>	<b>Poor documentation (over →)</b>



Lessons Learned / Best Practices				
19	Retained ORM risk assessments, lessons learned, and/or best practices for this evolution in a centralized, readily accessible location at the unit/group.	10	<b>7</b>	<b>Kept in NAV safe but ANAV-only access</b>
20	Shared ORM risk assessments, lessons learned, and/or best practices for this evolution with relevant external	10	<b>9</b>	<b>Used TRACS for ORM</b>
		<b>230</b>	<b>197</b>	
<b>Maximum Possible ⇒</b>				<b>⇐ Evolution Score</b>

Additional Comments, Lessons Learned, or Best Practices continued on reverse →



# Overall Scores

## Overall ORM Assessment – ORM Team Leader

- Evolution data collated into Overall ORM Assessment
- Shows task avgs. vs. class, fleet and desired scores plus overall ORM Proficiency Level (i.e., O1-O4, %, and level descriptor)

Summarizes evolution comments and provides recommendations

Used to debrief unit commander w/ original



Planning		Max.	Pts.	Class	Fleet	Comments
1	Identified and incorporated lessons learned, best practices, ORM risk assessments or other data from previous or similar evolutions during planning.	10	8.75	TBD	TBD	Proficient
2	Involved operators from every functional area necessary to conduct the evolution in planning.	10	8.5	TBD	TBD	Proficient
3	Conducted and documented a Deliberate or In-Depth ORM risk assessment during planning.	10	9.25	TBD	TBD	Exceptional
20	Shared ORM risk assessments, lessons learned, and/or best practices for this evolution with relevant external	10	9.5	TBD	TBD	Exceptional
Maximum Possible ⇒		250	225.3	⇒ Overall Score		
ORM Proficiency Level ⇒		O1	90.1%	Exceptional		



# Levels of ORM Proficiency

O1 is  $\geq 90\%$ , "Exceptional"

Maximum Possible $\Rightarrow$	240	229.8	$\Leftarrow$ Overall Score
ORM Proficiency Level $\Rightarrow$	O1	95.8%	Exceptional

O2 is 80-89.9%, "Proficient"

Maximum Possible $\Rightarrow$	240	208	$\Leftarrow$ Overall Score
ORM Proficiency Level $\Rightarrow$	O2	86.7%	Proficient

O3 is 70-79.9%, "Needs improvement"

Maximum Possible $\Rightarrow$	240	181.4	$\Leftarrow$ Overall Score
ORM Proficiency Level $\Rightarrow$	O3	75.6%	Needs improvement

O4 is  $< 70\%$ , "Unsatisfactory"

Maximum Possible $\Rightarrow$	240	167	$\Leftarrow$ Overall Score
ORM Proficiency Level $\Rightarrow$	O4	69.6%	Unsatisfactory





# Executive Summary

- Summarizes the individual evolution ORM task comments and provides specific recommendations for

## Executive Summary

1. Lessons learned, best practices or previous deliberate ORM risk assessments used infrequently (4 of 10 assessed evolutions). **RECOMMEND: Provide unit guidance to use lessons learned, best practices, deliberate ORM risk assessments, or other mishap/hazard data when planning for new or complex evolutions, time permitting.**
  2. Operator involvement from every functional area during planning was proficient (100% on 8 of 10 assessed evolutions) but Combat Systems dept. left out twice.
  3. Deliberate or In-Depth ORM risk assessments were performed infrequently (4 of 10 assessed evolutions) and documented even less frequently (3 of 10 assessed evolutions). **RECOMMEND: Provide unit guidance to document Deliberate or In-Depth ORM risk assessments for new or complex evolutions to include where to store them...**
- OVERALL: ORM Proficiency Level on graded evolutions was exceptional. BZ!**



# After We're Gone

- Naval Safety Center sanitizes data (to protect the innocent) then incorporates into class-specific (i.e., vessel/aircraft) and fleet databases
- Naval Safety Center will request feedback from assessors and unit/group commanders via electronic questionnaires regarding the overall ORM Assessment process
- ORM Assessment process will be refined based on assessor and unit/group commander feedback



# In Summary

- ORM Assessment process should be transparent to unit/group being evaluated
  - Except CO in brief/debrief by ORM Team Leader and possibly one additional rack
- ORM Assessment scores are “white hat” only for now (SUBFOR/SURFOR may go “black hat” in future)
  - Not reported to chain of command
  - Anonymous data will be retained for building class-specific & fleet databases (to protect the innocent)
  - Only provides snapshot of ORM process application during graded complex evolutions
- End-state goal is to have the ORM process



# Questions ?